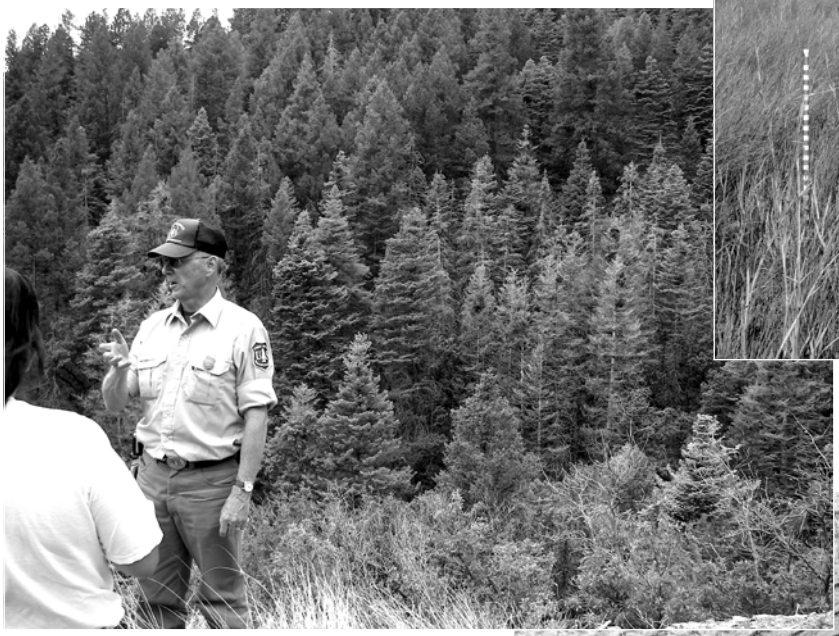
United States Department of Agriculture

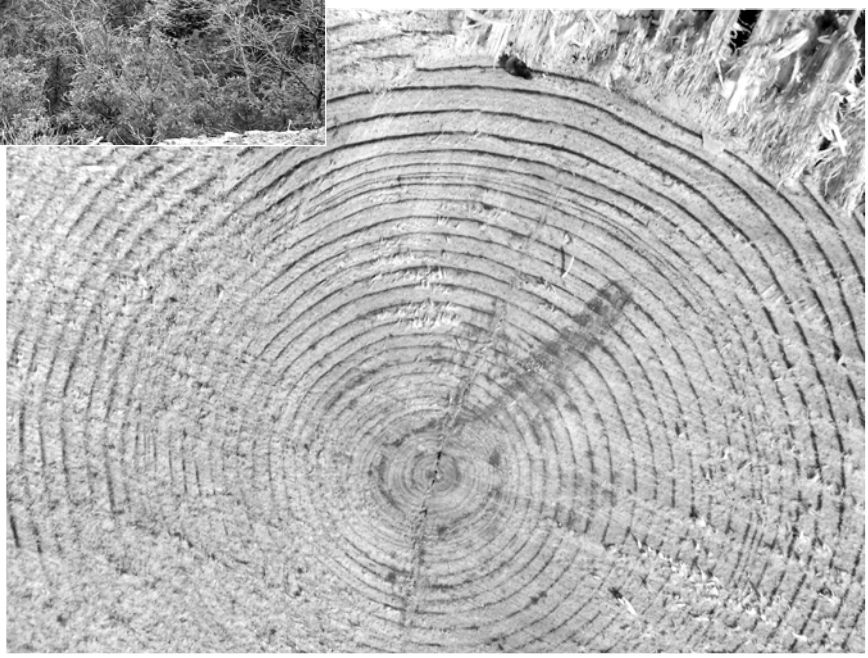
Forest Service

Southwestern Region

Cibola National Forest and National Grasslands Fiscal Year 2010 Monitoring and Evaluation Report

July 2011





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Forest Supervisor Certification

I certify that the Cibola National Forest Plan (Forest Plan) as amended is sufficient to guide future management of the Cibola National Forest and National Grasslands until the plan revision process is completed.

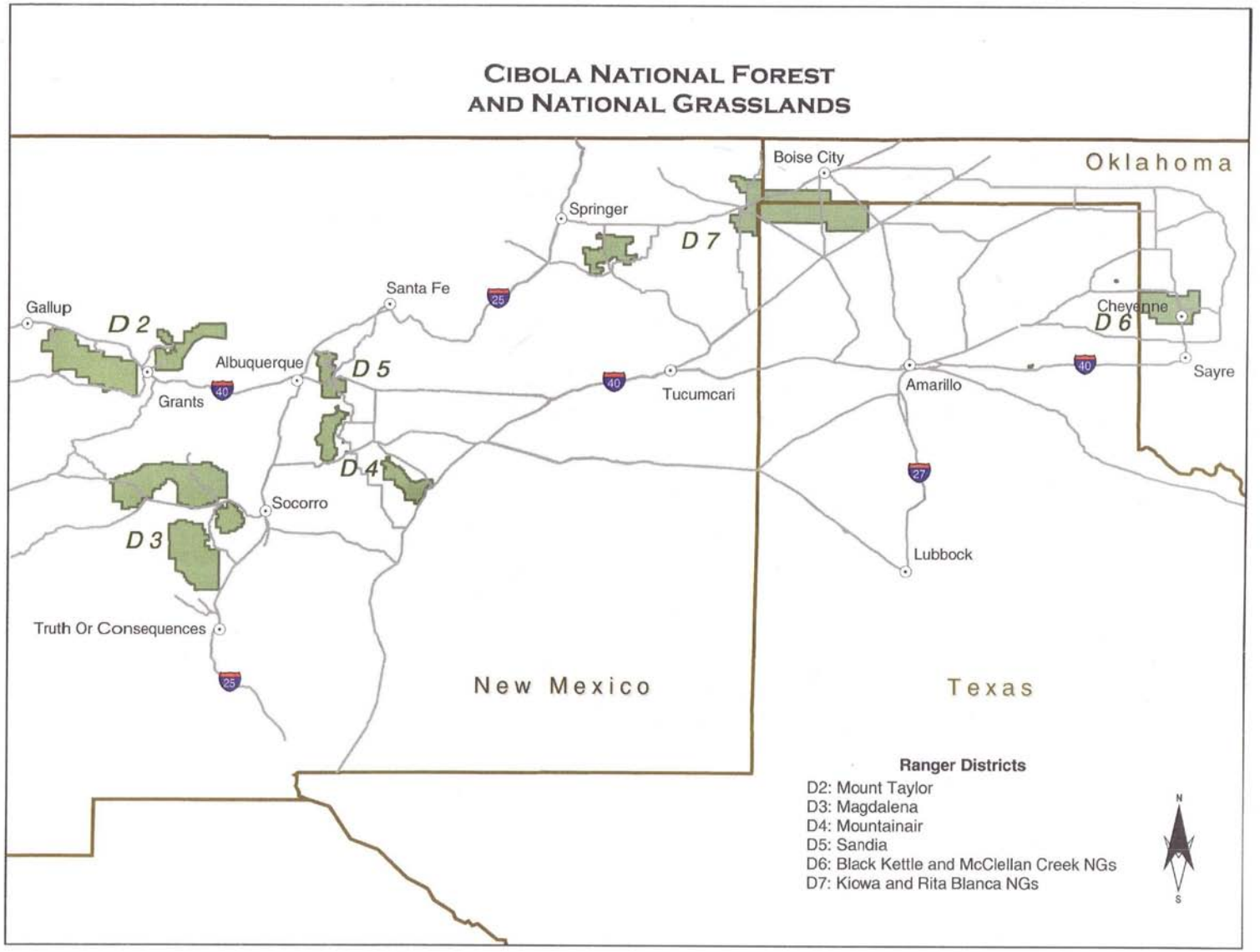
This Monitoring and Evaluation Report meets regulatory requirements for completing an annual report for the fiscal year of 2010, based on Section 219 of the 1982 planning rule provisions.

Nancy Rose

Nancy Rose, Forest Supervisor

July 13, 2011

Date


CIBOLA NATIONAL FOREST
AND NATIONAL GRASSLANDS
Boise City
Oklahoma
Springer
D 7
Santa Fe
Gallup
D 2
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Grants
Tucumcari
Cheyenne
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Sayre
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Ranger Districts
D2: Mount Taylor
D3: Magdalena
D4: Mountainair
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D6: Black Kettle and McClellan Creek NGs
D7: Kiowa and Rita Blanca NGs
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Executive Summary

This report presents fiscal year (FY) 2010 monitoring results of land and resource management activities important to achieving Forest-wide goals stated in the 1985 Cibola National Forest Plan and other, more recent initiatives and mandates.

This section summarizes the monitoring table found on pages 9 thru 28. It reports monitoring results and inferences that are anticipated to be relevant to future management.

Cultural resources monitoring in fiscal year FY 2010 consisted of 28 heritage resource sites that were determined to be eligible for the National Registry. Forty surveys were conducted for Section 106 clearances, and 84 sites were inspected to satisfy deferred maintenance requirements or were opportunistic inspections (non project related).

Monitoring by the engineering program shows that no new roads were constructed, and 19 miles of existing systems roads were reconstructed on the Cibola National Forest and Grasslands in FY 2010. Approximately 268 miles of Forest Service roads were maintained, and no roads were obliterated. Emphasis for FY 2011 and beyond will be working with the Ranger Districts on Travel Management planning and developing an inventory of all roads on FS lands.

The fire program conducted and monitored nine prescribed burns in FY 2010. Due to an above-normal year for winter and spring precipitation, there were fewer wildland fires and those that that did occur were smaller in size.

The Forestry program needs greater law enforcement presence to facilitate fuelwood permit and contract compliance. Resource damage is occurring in some areas due to insufficient law enforcement and the lack of qualified Forest Protection Officers to enforce permit and contract requirements. This is primarily a function of reduced budgets and zoning in law enforcement, and their inability to adequately staff for the complexity of law enforcement issues occurring on the Forest and within their Zone.

The spread of insects and disease and their associated effects is continuing to affect the Forest in various places. On the Sandia Ranger District, high mortality from tussock moth infestation has left many hazard trees in recreation sites. Hazard trees in and around the Sandia recreation sites are felled by Forest Service volunteers and can be gathered under fuelwood permits. Monitoring in 2010 revealed it is almost impossible to cut and remove dead, hazardous trees in relation to the rate of mortality.

Monitoring forest and watershed health across the Forest has shown that at the current management regime and funding levels the Forest does not have the ability to do activities at a scale large enough to change the landscape. However, strategic placements of treatments accomplished jointly by Forestry, Watershed, Wildlife, and Fuels programs can assist in treating the areas prioritized at having the most values at risk, which would include natural, cultural and community resources by sharing funding and personnel.

Lands adjustments monitoring indicates that the offering of one private in holding is proceeding. The Forest also acquired 1 right-of-way. Through travel management analysis, rights-of-way are being identified and opportunities explored.

Minerals monitoring activities indicated significant uranium exploration interests exist. Also, compliance inspections in this arena are reduced compared to past years, due to limited personnel. A significant number of mineral withdrawals need to be reviewed and appropriate action taken. The Forest, working with a BLM contractor, completed and submitted mineral withdrawals at special use, recreation and administrative sites in FY 2010.

Range monitoring has shown that weather and climate continue to be the most frequent reasons for adjusting grazing strategies through adaptive management processes. On the Kiowa and Rita Blanca National Grasslands, drought in FY 2010 combined with cumulative effects of below normal rainfall in preceding years resulted in lower forage production. Death of some forage plants is evident in Cimarron County, Oklahoma and Union county, New Mexico. Adaptive management has enhanced permittee compliance and is helping to meet management goals and objectives. Annual planning and cooperative strategizing has resulted in increased permittee compliance. Monitoring and analysis for rangeland ecological health has shown that conditions are shifting towards desired conditions in some areas. All inspected pastures were in compliance with the Annual Operation Instructions for FY 2010.

In the recreation program, considerable progress has been made in new trail construction and ongoing maintenance, including erosion control on burned and high use trails. On the Sandia District, 15 miles of trail new trail were constructed, and on the Magdalena District, 25 miles of trail were maintained or reconstructed. The National Visitor Use Monitoring assessment on the Forest and Grasslands is in process, but data will not be available until FY 2012. On Magdalena, Mountainair, and Black Kettle and McClellan Districts, condition surveys on developed recreation sites indicated that maintenance is needed on those sites.

The soil and water/watershed program began working with the University of New Mexico in FY 2010 to inventory springs across the forest and grasslands. This inventory will provide basic information about springs, using protocols developed by the U.S. Forest Service and other researchers. Location, flow, chemistry and management status are some of the attributes to be collected. Selected springs will be targeted for more intensive monitoring, such as the springs supporting the Zuni bluehead sucker, a rare fish. There are 255 named springs on the Cibola as inventoried using available GIS data. While this number may seem large, these springs are located across 1.9 million acres on six ranger districts in New Mexico, Oklahoma and Texas. Many of these springs are associated with stream channels. Over 63% of these springs have been developed for drinking water, wildlife, and livestock use. When springs are developed, the spring ecosystem is often impacted.

In the future, water demands will likely increase while water supplies may decrease. In this setting, springs are a nexus, with interconnected environmental, social and economic values. Environmentally, springs are sites of high biodiversity, they provide habitat for uncommon and rare species, support micro-climates and are sites for monitoring earth processes. Social values include recreational and spiritual values, while economic benefits stem from the use of water. Because of multiple values and uses, a strategy for sustaining these natural features is needed. This inventory is a first step in bettering the management of these valuable natural resources.

Opportunities for watershed improvement are being identified through an integrated approach and by assessing the effectiveness of best management practices. Vegetation projects provide the opportunity to improve soil condition where woody material is lacking. The wildlife program is communicating with watershed resources to improve riparian and watershed conditions for both resources. Recreational uses provide opportunities to improve watershed condition by re-routing trails away from surface waters. Range is working with watershed to improve springs where these features are used as water sources for livestock. Engineering provides assistance with improving roads or trails, and as needed, removal, to reduce impacts to water resources. By combining resources, 1219 acres of watershed were improved in FY 2010.

Monitoring of special use permits shows that permits issued for longer terms reduce the burden of re-issuance. However, compliance inspections are severely reduced due to limited personnel, and violations of permit conditions are occurring.

Monitoring of projects for wildlife habitat improvement has led to several observations about their effectiveness. Forest-wide thinning, plantings, and prescribed burning has improved vegetation and water yield on 21,420 acres and has improved habitat for deer, elk, quail, turkey, Northern Goshawk, and Lesser-prairie Chicken. Three goshawk territories were found to be active, and nesting success was determined to be lower on the Mountainair and Sandia Districts than in FY 2009. No southwestern willow flycatchers were detected despite available and suitable habitat on Mount Taylor and Mountainair Districts. Twenty one territories of MSO were occupied in FY 2010. Two Peregrine falcons were permitted by NMDFG for take for falconry near Bluewater. A closure order was updated and signed on Sandia District to protect this species. Monitoring of MIS populations were all found to be stable or trending upward. Raptor passage rages on Mountainair and Magdalena Districts generally increased (with exceptions) for falcons and buteos, decreased for vultures, and was mixed for accipiters in FY 2010. On the Kiowa and Rita Blanca National Grasslands, black-tailed prairie dogs were monitored by Kansas State Univ. and other partners, and colony area substantially expanded from 2009. Functionality of water developments was identified as a problem at about one-third of windmill sites on Black Kettle and McClellan Creek Ranger District. Monitoring of the Habitat Stamp program projects provides data that is helpful in determining maintenance needs of wildlife structures.

Forest Plan Background and Amendments

The Forest Plan and associated Environmental Impact Statement (EIS) were published in 1985. Preliminary Forest staff recommendations for updating the Forest Plan were developed in 1996-1999 and are contained in the Geographic Area Assessments produced by the Interdisciplinary Team.

The following amendments have been made to the 1985 Forest Plan:

Amendment Number	Decision Date	Amendment Description
Amendment #1	01/09/87	Clarified language throughout all five chapters
Amendment #2	05/25/89	Added electronic site near Boise City, OK for the Coast Guard's Long-Range Aid to Navigation (LORAN-C)
Amendment #3	06/30/89	Changed timber projections based on projects in Las Huertas Canyon near Placitas, NM
Amendment #4	05/29/90	Revised the 10-year timber sale schedule, amended fire management Standards &Guidelines (S&Gs), added black bear and curlew to the MIS list, changed ROS for MAs 8 and 13, RATM
Amendment #5	06/27/90	Designated Oso Ridge Lookout as an electronic site
Amendment #6	09/06/91	Established S&Gs for capital investment priorities and Sandia winter use; added the grasshopper sparrow to the MIS list; and established S&Gs for Aberts squirrel
Amendment #7	09/09/96	Added Regional direction for management of Mexican spotted owl, northern goshawk, grazing, old growth
Amendment #8	12/20/96	Returned federal lands near Kirkland Air Force Base from DOE back to the National Forest System
Amendment #9	09/18/97	Established Bernalillo Watershed Research Natural Area
Amendment #10	10/17/02	Identified eligible wild and scenic rivers and added direction for protecting their values
Amendment #11	07/10/08	Changes to Sandia RD direction required by Travel Management decision
Amendment #12	08/26/08	Changes to Grasslands (Management Areas 4 and 5) oil and gas leasing stipulations

Table of Monitoring Activities, Results, and Relevant Comments for FY 2010, Cibola National Forest and National Grasslands

ABBREVIATIONS USED IN TABLE

ARRA – American Recovery and Reinvestment Act
AUM – Animal Unit Month
BBS – Breeding bird survey
BLM – Bureau of Land Management
CCF – 100 cubic feet
CFRP – Collaborative Forest Restoration Program
D2 – Mount Taylor Ranger District
D3 – Magdalena Ranger District
D4 – Mountainair Ranger District
D5 – Sandia Ranger District
D6 – Black Kettle and McClellan Creek Ranger District
D7 – Kiowa and Rita Blanca Ranger District
EIS – Environmental Impact Statement
EMIFPA – East Mountain Interagency Fire Protection Assoc.
FACTS – Forest Service Activity Tracking System
FARSITE - Fire behavior and growth simulator
FS – Forest Service
FSveg – Field Sampled Vegetation database
GIS – Geographic Information System
IDIQ – Indefinite Delivery Indefinite Quantity Contract
INFRA – Infrastructure database
NEPA –National Environmental Policy Act
NMDGF – New Mexico Dept. of Game & Fish
NMSU – New Mexico State University
NWI – National Wetlands Inventory
ODWC – Okla. Dept. of Wildlife Conservation
PAC – Protected Activity Center
PAOT- People at one time
PTSAR – Periodic Timber Sale Accomplishment Report
RAR – Roads Accomplishment Report
RD – Ranger District
RO – Regional Office
RX – Prescribed burn
SO – Forest Supervisor's Office
TDPW – Texas Dept. of Parks and Wildlife
TEUI – Terrestrial Ecological Unit Inventory
TIM – Timber Information Manager Software Application
USGS – U.S. Geological Survey
WUI – Wildland urban interface

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Cultural Resources	Cultural Resources listed in or eligible to the National Register of Historic Places	SO	All	28 heritage resource sites determined eligible to the National Register	Total number of sites documented in FY-2010: 84
Cultural Resources	Clearance Surveys for Cultural Resources	SO	All	40 surveys, totaling 4,892 acres for Section 106 clearances	Total acres cleared for undertakings, based on previous and new surveys: 16,292.
Engineering	Miles of road construction/reconstruction	RAR	D3, D4	19.02 miles	Reconstruction activity (not new construction) precipitated by road failures.
Engineering	Miles of level 3, 4, and 5 road maintenance	RAR	D2, D3, D4	267.60 miles	
Engineering	Miles of road obliterated	RAR	N/A	0	No obliteration in FY10
Fire/Fuels	Monitored during- and after-treatment conditions including smoke, weather, fire behavior, fire effects on residual vegetation and other resources.	District files burn plan file, FACTS	Forestwide	Wildland fires in FY 2010 totaled 964 acres. Nine prescribed burns of all types totaled 14,550 acres.	
Forestry	Monitored compliance with silvicultural prescriptions including post-treatment basal areas, canopy cover, stand densities, snag retention, and implementation of mitigation measures in timber sale, personal use firewood programs, and CFRP thinning grants administered in FY10.	Forestry records located in individual District Project files and at SO	D2, D3, D4, SO	Inspections indicated compliance.	Timely inspections are key to achieving desired results when implementing Designation by Description on commercial and service contracts (D2,D4). Monitoring has allowed the district to make length of season adjustments in personal-use firewood (D2, D3). Monitoring has also allowed district to make area-wide designations for personal-use firewood (D3).

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					Desired results are also achieved through interaction and collaboration with grant partners (D2, D3, D4).
Forestry	Monitored for insect or disease damage to forest stands through aerial survey (by RO) and ground sampling Monitored for insect activity within active timber Sales & thinning projects (D2,D3,D4)	Forestry files	Forest-wide D2,D3,D4	Mortality continues by Douglas-fir tussock moth in white fir and Douglas-fir, and by and various other bark beetles (D5), but levels are less than in previous years.	Slash from mechanical thinning needs to be monitored more closely for insect infestations and outbreaks. (D2). Monitoring for insect activity within timber sales and thinning projects has allowed work to continue during the bark beetle season (January-June) (D2,D4).
Forestry	Monitored for hazard trees at all developed recreation sites, some undeveloped recreation sites, post-wildfire burn areas and roads	District recreation files	Forest-wide	There is continued mortality, mostly white fir, in Sandia Districts developed recreation sites (D5). Little unauthorized off-road travel has occurred. (D5).	Coordinated with wildlife on the timing of hazard tree removal to reduce the impact on cavity nesters. Generally the fall is the best time of the year (D5, D4, D3, D2). Bucking of fallen trees is not necessary to ensure removal; fuelwood permittees do it and carry bucked sections over 100 feet to parking areas. It is very difficult to keep up with mortality and removal of hazard trees (D5). Volunteers have assisted in keeping up with removal of hazard trees in 2010, but the work is continuous.
Forestry	Monitored commercial and personal-use fuelwood areas for compliance with permits and contract requirements.	District forestry files	Forest-wide	Wood theft and timber trespass are occurring. Compliance with closure orders is not always occurring.	Due to lack of FPOs and law enforcement, the Forest has moved to load ticket system and NEPA designated fuelwood areas-forestwide. Law enforcement is not sufficient (D2, D4, D3). There continues to be inadequate funding of the Forest Protection Officer (FPO) program (D2, D4,D3). Resource

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					damage is occurring and there is no repercussion. Law enforcement is insufficient in those areas incurring resource damage (D2, D4, D3).
Forestry	Acres of overstory and final removal harvest	TIM	RDs	In FY 2010 we accomplished 0 acres of this harvest system.	
Forestry	Acres of Intermediate Harvest	TIM and project files	RDs	In FY 2010 we accomplished 2,812 acres of this harvest system.	
Forestry	Acres in need of reforestation	FACTs	Forestwide	Due to wildfires in 2007 and 2008 in the east mountains we identified in FY 2010 an additional 370 acres in need (D4).	
Forestry	Timber Stand Improvement Acres	FACTs	D2	In FY 2010 we accomplished 2,316 acres.	
Forestry	CCF of net sawtimber sold	PTSAR	Forestwide	1825 CCF	
Forestry	Adequate restocking of regeneration harvest	FACTs	Forestwide	N/A- no acres for FY 2010	Group selection harvests have occurred, but regeneration surveys are not conducted until year 5 following the harvest.
Forestry	Stands and acres of forest lands identified and tracked in FSVeg-Common Stand Exams.	FSVeg	Forest-wide	There are currently 322 stands identified and tracked in FSVeg, totaling 206,898 ac.	Other stands have been identified, but attribute information has not yet been entered into FSVeg. As projects occur in these stands, attributes are entered.
Land Adjustments	Monitoring private in-holdings for available acquisition.	SO	Forest-wide	No Acquisition of in-holdings were processed. Completed administrative process for sale of Baldwin Cabin property, cabin is now offered.	The Forest continues to solicit and take advantage of opportunities as they become available, and has developed a Forest-wide priority list.

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Land Adjustments	Monitoring of right-of-way acquisition through private in holdings.	SO	Forest-wide	Acquisition of 1 ROW on Trigo Cyn Road accessing a developed campground and trailhead (Forest Road 33).	Through travel management analysis, ROW needs are being identified and opportunities explored.
Minerals	Monitoring for compliance with Plans of Operations	SO	D2, D3, D4		Significant uranium exploration interest (D2, D3). Significant non-uranium exploration interest (D4).
Minerals	Monitoring well pad construction for compliance with permit and condition approval; environmental effects during construction phase, inspections of well sites to ensure compliance with COA's and permit.	D6	D6		Compliance inspections are reduced due to limited personnel.
Minerals	Monitoring mineral withdrawals at comm. sites, developed recreation facilities and administrative sites for renewals.	SO	All	Current additions and withdrawals are being reviewed and appropriate action taken. The Forest worked with a BLM contractor and completed/submitted a review in 2010. Added Water Canyon Recreation area and withdrew Red Cloud Campground.	
Range	Monitored allotments and range structural improvements. Methods included field inspection (visual) photo, stubble height.	District files Recorded in INFRA	All	410 allotments were monitored for utilization, permit, and improvement maintenance compliance. 351-grassland units and 59 forest allotments. Compliance was attained.	When adjustments were needed, adaptive management was applied. Range trend across the forest was determined to be stable. Some short term adjustments were made as a result of localized precipitation deficits.

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Range	Permitted Use on D2, D3, D4.	District	D2, D3, D4	140, 375 AUM's – permitted 94,923 AUM's - authorized	Stocking levels reduced; permittees grazed fewer numbers than in previous years due to drought conditions. High cattle prices prevented purchases of cattle to rebuild herd numbers.
Range	Grazing Capacity and Range Condition on D2, D3, D4	District files	D2, D3, D4	Showed stable to upward trend.	Methods included field inspection (visual) photo, weight and measurement of forage grasses. Trend studies conducted on 3 allotments to determine long range trend. Completed 4 NEPA grazing decisions on D3.
Noxious Weeds	Acres of noxious/invasive species treated	D7, SO	D-7	944 acres of Salt Cedar treated on the Canadian River.	Aerial spray of Salt Cedar completed in Canadian River portion of the Kiowa National Grassland. Conducted in cooperation with The Canadian Soil and Water Conservation District as Part of a multi-landownership treatment project.
Recreation	Miles of Non-Wilderness trail construction or reconstruction and maintenance	INFRA/ARRA files	D3, D5	Majority of the trails maintained were due to ARRA funding. Sandia RD had one trail rerouted with legacy funds.	25 miles were maintained on D3 and 15 miles were constructed and maintained on D5
Recreation	Developed site use, public and private sector	District files, RO, WO	D2, D3, D4, D5, D6, D7	National Visitor Use Monitoring is currently in process and data will not be available until FY12	Results are pending

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Recreation	Condition of developed sites in the public sector.	INFRA and Recreation Office, SO; Zone Silvicultu-rist; Contracting Office	D3,D4, D6	Deferred maintenance is needed	
Soil & Water	Watershed improvement acres.	All Districts Offices	All Districts	Watershed condition improved on 1,219 acres.	Largely accomplished through integrated projects with wildlife, recreation, engineering, vegetation, and range.
Soil & Water	Riparian acres treated to bring to satisfactory condition.	SO	All	Twenty acres of restoration work in Cedro Creek (D5).	Rerouted trail in riparian area of Cedro Creek. Spring monitoring is being conducted through Cost Share Agreement with Univ. of NM. Springs are being characterized in term of chemistry, flow, risks, improvement needs, and other factors. Most springs are developed across the forest.
Soil & Water	Best Management Practices (BMPs) – Monitor projects to determine implementation and suitability of BMP recommendations.	SO	D2, D4, D5	Additional practices identified to improve soil condition during vegetative treatments	Addressing lack of woody material in streams. Utilizing TEU data to protect soil during fuelwood harvest.

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Soil & Water	Successful closing and obliteration of temp roads and unauthorized motorized trails.	SO Travel Mgmt. Records	All	High risk roads identified. Some NEPA completed. Removed unauthorized trail along Cedro Creek (D5).	Implementation of travel management decision may take awhile. Reroute and restoration has prevented road drainage from entering Cedro Creek.
Special Use Permits - Lands	Monitoring for compliance with permit terms and conditions, including environmental effects, during special use permit administration (includes land special use permits).	SO/Districts	Forest wide	Technical inspection Completed for the Sandia Crest Site in FY2010. Reviewing RF exposure at Cedro Look Out as a result of grounding inspection.	Permits now being issued for longer term to reduce burden of permit issuance. Electronic sites need more technical inspection. On-site inspections are reduced due to lack of personnel at District level. Monitoring for NEPA compliance with permit reissuance.
Special Use Permit – Lands	Monitoring pipelines, power lines, seismic and telephone special use permits for compliance with terms and conditions, environmental effects during special use permit administration.	SO	Forest wide	Monitoring shows that potential violations of permit conditions are occurring. However, compliance by facility owners is improving as a result of monitoring.	
Special Use Leases – Lands	Monitoring of availability of electronic site acres.	SO	D2, D3, D4, D5, D6	There are approx. 310 acres designated as communication sites. Completed site plans for Sugarloaf Mountain and West Knoll Communication Sites. Completed NEPA for the Riconada Communication Site proposal (decision to be made early 2011).	These sites will accommodate either high or low power use, with one being mixed use. They are identified for commercial use or stipulated to accommodate governmental use only (federal agencies or military). Am assisting US Customs and Border Protection Agency with locating and permitting of facilities to accomplish a priority need.
Visual Quality		n/a		No monitoring completed.	Travel Management priority precluded monitoring.

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
Wildlife	Acres of browse vegetation treated to improve availability and productivity	District Offices	D2, D3, D4, D6	Acres D2: 5500 D3:7750 D4/D5:252 ac. D6:7058 D7:1130	D2- Copperton and Foster Rx burn and thinning conducted in the Bluewater EIS area. Wingate HPA was closed to motorized vehicles during the winter months to protect winter habitat for wildlife species, especially winter range for mule deer. Gates and signs are used to give notice to the public that the area is closed from December to March. D3- Fisher RX burn implemented 2010. Photo point monitoring of East Magdalena Burn continues to show increased vegetative diversity and cover particularly in early successional species. Aspen sites have also shown increase in condition. Water yield and condition of natural springs and seeps has also shown improvement in condition. D4/5 -The old "Tajique Fire" burned a total of over 900 acres in the 1980s. Since then the area has grown back with dense stands of mostly alligator, and one-seed juniper. These are young trees standing an average of ten feet tall. There are several dense stands of mostly ponderosa pine in the higher elevations of the area ten – fifteen feet tall. A total of 154 acres were thinned. Thinning of the juniper stands was done leaving one tree every 20 feet on

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					average. In some flatter areas small openings were left (1-2 acres) and all trees were cut. Ponderosa areas were thinned leaving "clumps and stringers" and a few 1-2 acre openings. D4/5 - The Tajique meadow restoration project resulted in 98 acres of meadow being maintained by removing encroaching and trees from eight meadows which were in danger of losing their function as meadows. D6- Forty-six food plots were planted in late summer with a mixture of oats, wheat, cowpeas, winter peas, vetch and turnips to provide forage for deer, quail and turkey and to reduce wildlife impacts to adjacent private crop land. Each food plot averaged 2-3 acres in size. The result of the food plots is an increased carrying capacity on 160 acres for each plot planted and increased harvest of white-tailed deer. Conducted 5,680 acres of broadcast burns in mixed grass prairie and shinnery oak grasslands to create a mosaic of successional stages in shinnery oak, reduce trees and invasive species within upland sites. The burns improved wildlife forage and cover habitat by increasing warm season grasses within the shinnery

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					habitat. Burns were conducted in Units 2, 10, 17, 26, 37, 41, 46, 54, 55, 56, 58, 91 and the Red Star area. Post burn monitoring showed a significant increase in early successional plant species, vegetative diversity and bare ground which is important for ground foraging birds such as lesser prairie chicken, bobwhite quail, and Rio Grande turkey. The burns also showed significant increases in brush and hardwood tree resprouting and diversity to improve forage and fawning cover for white tailed deer. Also conducted 200 acre prescribed burned to maintain riparian habitat. D6 - 1120 acres lesser prairie-chicken habitat was improved by planting a winter food source in seven fields. Milo, millet, sorghum and peas were planted near occupied habitat, and within areas of suitable habitat. The plantings also benefit locally important species such as bobwhite quail, Rio Grande turkey and white-tailed deer. D7 - 415 acres burned in Mills Canyon for deer and 715 acres near Seneca Creek for lesser prairie chicken. Lesser prairie-chickens are a declining species dependent

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					on mid-grass and shrub/grassland habitats. The historical range of the lesser prairie-chicken includes northeastern New Mexico, however, lesser prairie-chicken are no longer permanent residents on Kiowa National Grassland. Currently, potential lesser prairie-chicken habitats on the Grassland (sandy soils) are unsuitable due to excessively thick vegetation. While thick vegetation is valuable for cover, burning provides areas which are also suitable for booming grounds (leks), nesting, and foraging/brood rearing habitat. Lek locations are characterized by open areas with short vegetation, nesting habitat is typically in tall and thick vegetation surrounded by more open areas, and foraging /brood rearing habitats are moderately open areas with abundant forbs. Photo points were established and photos taken prior to and after the Seneca Rx burn.
Wildlife	Monitored water developments.	District project or work records	All	Number of developments monitored: D2:4 D3: 56 D4:21 D5: 4 D6: 32	Continued maintenance is necessary. Large component of work for 13/13 Zone technician on D4/5. D6-Windmill overflows are evaluated for effectiveness and proper functioning.

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
				D7: 0 Identified water developments that need maintenance, and helped prioritize sites for future replacement of aging infrastructure. On D6, approximately 1/3 of the windmills were broken and not working or turned off and water was not available for wildlife.	
Wildlife	Monitored number of quality snags per acre	Triannual Field review of forest product sale areas	All	Not monitored this period.	
Wildlife	Monitored number of roost groups	Triannual Field review of forest product sale areas	All	Not monitored this period.	
Wildlife	Monitored known Northern Goshawk PFAs.	SO and District wildlife files	D2, D3, D4, D5	D2=15 territories D3=0 territories D4=5 territories D5=3 territories No known goshawk reproduction for D4 or D5 in 2010. Also monitored for presence of Northern Goshawk in Dog Head and Big Spring areas of Isleta CFRP project.	D2-Three territories of 15 were active. The need to identify a PFA in the Sedgewick area based on repeated sightings has been identified. D3- The Forest was not able to determine occupancy at territories in 2011because of other priorities. The need to determine a PFA in the Datil mountains has been identified based on repeated sightings of a

Program Area	Monitoring Accomplished	Record Location	Districts	Results	Comments
					goshawk there. D4/5 nesting success was significantly lower than results for 2009.
Wildlife	Monitored for reproductive success and occupancy of threatened and endangered animals.	District	D2, D3,D4, D5	Southwestern willow flycatcher (SWWF) territories monitored D2:1; None detected. D4:1 (potential habitat); None detected. Mexican Spotted Owl (MSO) territories monitored: D2:19 territories, 17 monitored in 2010 with 4 occupied; D3:33 territories, 29 monitored in 2010 with 17 occupied D5-About 900 acres were inventoried by protocol for MSO for the Sandia Hazard Tree Removal project. No MSO were detected.	D2-Monitoring visit to Bluewater in FY 2010. As required by protocol, three visits were made to lower Bluewater from FR 178 to Andrew's cabin but no SWWF were detected. Visits occurred on 5-11, 6-15 and 7-7; The riparian enclosure fence was maintained by District personnel. Less water than last year esp. near the "bog". On the first visit, coyote willows not leafed out and bluestem just barely emerging, by the second visit in June the coyote willows were still not completely leafed out. It could be that SWWFs bypass the bog in May when it still appears inhospitable The colony of Brewer's blackbirds that have nested in the bog since at least 1995 have suddenly departed. D4-SWWF monitoring visit to Tajique in FY 2010: No SWWF were detected at or near Sun Valley on 6-01-10. D3-East Magdalena MSO Protected Activity Center (PAC) was monitored using photo points to conclude that high intensity fire had the most beneficial effects as far as improvement in vegetative

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					cover and recovery of water dependent sites. D4-no MSO monitoring occurred.
Wildlife	Monitored Aplomado falcon prey species and population trend (Two one mile BBS transects conducted annually by volunteers).	District	D3	No Aplomado Falcons have been observed.	D3-The District continues to establish baseline for prey species abundance and determines absence of Aplomado falcons in suitable habitat on three grazing allotments.
Wildlife	Monitored Peregrine Falcon Eyrie occupancy and nest success (Random sample conducted by NMDGF contractors).	NMDGF, District Files	D2, D3,D4, D5	Sites were monitored by NMDGF and Forest Service personnel. Take at peregrine sites for falconry purposes was permitted by NMDGF on the Cibola this year with two taken near Bluewater.	Closure order to protect this species on D5 was updated, signed, implemented and monitored. Take at peregrine sites for falconry purposes was not permitted by NMDGF on the Cibola in FY2010.
Wildlife	Ferruginous Hawk Nest Monitoring – nest occupancy	SO, D7	D7	8 NM, 2 OK and 1 TX sites were monitored in FY 2010 .	Not all the platforms in OK were checked; documented first-time use for the RB -14 platform in TX. Timing: The best time to monitor the platforms is from about June 18 to June 25 because the young are close to fledging then, are readily visible and easy to count. Visits to the platforms in April are not particularly useful and may be detrimental to birds known for their propensity to abandon their clutch when disturbed early in the breeding season. On average ferruginous hawk egg incubation starts around April 18, hatching about May 11 and the young fledge about June 26.

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Wildlife	Black-tailed prairie dog monitoring	SO and District	D7	Three trips were made by Kansas State Univ. (KSU) to map prairie dog colonies at D7 during 2010: September 9-14 and 23-29, and October 12-16. Prairie dog colonies on portions of the High Lonesome area of the Rita Blanca Grasslands were dusted by Texas Animal, Plant Health Inspection Service to control plague. At the time of mapping in 2010, colony area expanded substantially from 2009, increasing from 712.7 to 1105.8 Between 2009 and 2010, colony area increased on all portions of the grasslands by from 36-48%. Two colonies decreased in size in the RBEast, one of them, RB86B, from 9.96 ha to 0. This was the only colony identified during 2010 that might have declined with a pattern characteristic of plague, although the cause of the decline remains speculative. No declines were documented on the NCRB, 4 small colonies declined on the High Lonesome, but none showed the steep declines characteristic of plague epizootics. colony area on the High lonesome grew from 256.7 ha to 361.9. Colonies mapped both years grew by 41% between 2009-2010.	The biologist for D7 accompanied KSU to help with mapping on several days.

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Wildlife	Zuni bluehead sucker monitoring	D2, SO Wildlife Files	D2	Population monitoring completed in historical habitat. Persistence of ZBS confirmed in the Aqua Remora, Tampico Springs, Tampico Draw and Rio Nutria. Monitoring did not occur on Zuni Tribal lands in 2010.	Habitat and population monitoring conducted by NMDGF is documented with an annual report. Conservation actions for ZBS included removal of nonnative green sunfish from the Aqua Remora, collection of larval and adult ZBS for captive rearing investigations, and research into conservation genetics. Habitat conservation focused on repair of an existing enclosure fence around the FS portion of occupied habitat. The FS also constructed a low standard admin use road to provide access to the FS portion of occupied habitat for monitoring purposes.
Wildlife	Threatened and Endangered / sensitive plants - Zuni fleabane. Monitored Sandia Alumroot locations along Crest Trail during maintenance period.	SO and District Wildlife Files SO and District Wildlife Files	D3 D4, D5	The FS administered a contract to map potential habitat for the Zuni fleabane using Terrestrial Ecosystem Units and geologic formation maps. Results were used to propose mineral withdrawals in the Datil Mountains on D3. While this plant primarily occurs on West slope, it is found on East side along Crest Trail (D4, D5).	About 606 acres were proposed for mineral withdrawal to recovery the Zuni fleabane. 'Flag & Avoid' communicated to trail crew.
Wildlife	Monitored occurrence and population trend of migratory and resident birds on about	SO and District wildlife	D2:2 two mile routes; D3:2 two	Management Indicator Species (MIS):	USGS Breeding Bird Survey has accumulated enough data during the last forty years to delineate state level

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	140 miles of transects to determine Habitat Trends- Habitat Diversity.	files. Annual Cibola Breeding Bird Survey Report	mile routes; D4: 2 one mile routes; D5:1 one mile route; D6: 6 one mile route; D7: 3 one or two mile routes.	Juniper Titmouse - statewide population trend down, Cibola habitat trend stable. Pygmy Nuthatch- statewide population trend stable, Cibola habitat trend stable. Hairy Woodpecker-statewide population trend slightly up, Cibola habitat trend stable. Red-breasted Nuthatch-statewide population trend slightly up, Cibola habitat trend stable. Red-naped Sapsucker- statewide population trend up, Cibola habitat trend stable. House Wren- statewide population trend stable, Cibola habitat trend stable to upward.	population trends. Population trends on 1 and 2 mile Cibola routes can be used to compare trends at the state and National level. Juniper titmouse is especially well suited to be a MIS because it is so sedentary and disinclined to wander, even in winter. Species prefers juniper dominated P/J woodlands. Pygmy nuthatch is often seen in flocks, causing considerable variance from year to year, thus distorting the trend. The long term habitat trend is stable. Considerable restoration is planned for ponderosa habitat, i.e., it is being thinned and burned, allowing for the growth of fewer, but larger, healthier trees, but stand replacing wildfires are likely to continue. While generally hairy woodpecker seems to be undercounted, sometimes the opposite is true, when the bird appears in clusters, as after a forest fire when trees often become infested with bugs and grubs. Such fluctuations tend to throw off the trend estimates, as can be seen in Claunch and Claunch2 BBS where the trend oscillates wildly between extremes.

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					Red-breasted nuthatch is a nomad resident occurring abundantly one year and perhaps not at all the next, a phenomenon mostly linked to the availability of food supplies, i.e., a good cone crop. Red-naped sapsucker is difficult to detect, but has high site fidelity so can indicate habitat quality over the long-term in areas where it is known to occur. House wren is an appropriate indicator species for lower elevation riparian habitat. USGS Breeding Bird Survey = These 24.5-mile, randomly-selected surveys are conducted according to protocol. They begin one half hour before sunrise, with stops every half mile. At each of the 50 STOPS, birds seen and heard, are counted for three minutes. Conducted annually. These, mostly habitat-specific, fine-filter surveys are generally from one mile to two miles in length and either have six or eleven points, spaced .2 miles apart. Birds are counted for ten minutes at each point. Transects are rotated at 1-5 yr. intervals.

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Wildlife	Monitored Game - Management Indicator Species: Merriam's Turkey Rocky Mountain Elk Mule Deer Black Bear Rio Grande Turkey	So and District Wildlife Files, NMDGF, ODWC, TDPW	All	NMDGF local officers continue to collect survey data from hunters recording harvest and sightings on D2, D3,D4, D5, and the Kiowa NG on D7. D3 - Aerial surveys continue to be done by NMDGF for elk and deer. D4 - Conducted wildlife photo point monitoring at 25 sites in the Manzano unit and 6 sites in the Gallinas unit to track changes in grass and browse species quantity and quality for MIS including deer, turkey. D6 - ODWC continues to gather Rio Grande turkey winter flock population estimates.	Thinning and burning projects increases grass, forb, and shrub component compared to previous conditions.
Wildlife	Monitored trends of migrating raptor populations on the Sandia and Manzano Mountains. Monitored Fall Passerine bird species by trapping at Capilla Peak.	SO and D4 wildlife files	D4	Fall 2010- Raptor migration-Passage rate trends among 17 species seen in most years: adjusted passage rates were significantly above average for Sharped-shinned Hawks, Broad-winged Hawk, Swainson's hawk, and Merlin, whereas passage rates were significantly below average for Turkey Vulture, Osprey, Northern Harrier, Red-tailed Hawk, Ferruginous Hawk, and Rough-legged Hawk.	HawkWatch did not monitor populations on Sandia for the first time this year due to declining partner contributions. Annual counts typically range between 5,000 and 7,000 migrants of up to 18 species. The project runs from 15 August through 5 November each year. The information gathered in these studies is used to better understand the life histories, ecology, status, and conservation needs of raptor populations. HWI has banded more than 18,000 raptors at this site since 1990. In 1999, HWI began tracking raptors

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					banded in the Manzanos using satellite telemetry to learn more about the breeding and wintering distributions and migratory habits of The Manzano site is also used to document lead contamination in Cooper's Hawks using the flyway.
Wildlife	Monitored Habitat Stamp Number of projects, effectiveness and wildlife use.	SO and District wildlife files	D2, D3, D4, D5, D7	Monitored 157 projects D2=12 D3=65 D4=25 D5=7 D6=47 D7=1	Provides data that is helpful in determining maintenance needs. D7-Observed scaled quail in burned area of Seneca Creek after the burn. D6-Monitored wildlife food plots to determine productivity of species planted and use by wildlife by visually inspecting the plots and with wildlife monitoring cameras. Use on the sites was very high by deer and turkey. Monitored Rio Grande Turkey roosts sites after areas were cleared of invasive species. Regrowth of native species included young cottonwood trees, although browsing from white-tailed deer was very heavy. Ten browse exclosures were erected.